

CLAIMS

1. A method for optimizing ingredient selection for further processing comprising the steps of;
providing a supply of at least one ingredient;
5 calculating at least a first element of said at least one ingredient contained within said supply; and
selecting said at least one ingredient from said supply based on said calculation which correspond to a predetermined recipe to achieve an end product.

10 2. A method for optimizing ingredient selection as recited in claim 1, wherein said first element is an approximate cost of using said ingredient.

3. A method for optimizing ingredient selection as recited in claim 1, wherein said first element relates to nutritional properties of said ingredient.

15 4. A method for optimizing ingredient selection as recited in claim 1, wherein said first element relates to functional properties of said ingredient.

5. A method for optimizing ingredient selection as recited in claim 3, wherein the nutritional property is protein content.

6. A method for optimizing ingredient selection as recited in claim 3, wherein the nutritional property is fiber content.

20 7. A method for optimizing ingredient selection as recited in claim 1, wherein said first element relates to a physical property of said ingredient.

8. A method for optimizing ingredient selection as recited in claim 6, wherein the physical property is moisture content.

25 9. A method for optimizing ingredient selection as recited in claim 6, wherein the physical property is weight.

10. A method for optimizing ingredient selection as recited in claim 1, wherein said recipe is for flour manufacture.

11. A method for optimizing ingredient selection as recited in claim 1, wherein said ingredient is a grain.

12. A method for producing a blended product comprising:

(a) downloading, over a network, time-sensitive data representing the current cost of at least one material whose price fluctuates based at least in part on market conditions;

5 (b) using said downloaded current cost information to calculate an actual
cost of blending said product;

(c) automatically calculating the difference between said actual blend cost and a model blend cost; and

10 (d) making a decision to blend said product based at least in part on said calculation.

13. The method as in claim 11 wherein said material comprises grain and said downloaded cost data comprises a grain cost card.

14. A system for controlling grain mixing, said system being coupled
over a data network to a source of current grain prices, said system receiving
15 information relating to currently prevailing grain cost, said system including:

a blend processor which, based on desired mix and source bin designations and said currently prevailing grain cost, calculates a blend cost and compares said blend cost with a model cost, said blend processor generating a blend mix output that specifies the amount of each of plural grain lots to mix in order to achieve said desired mix; and

a mass storage device operatively coupled to said blend processor, said mass storage device storing historical data concerning previous blends.

15. The method as in claim 13 wherein said blend processor retrieves currently prevailing grain cost data via said data network at least once a day.

25 16. The system of claim 13 wherein said blend processor generates a
blend entry data form providing interactive user input/output.

17. The system as in claim 13 wherein said blend mix output includes number of bushel information, percent protein information, and grain moisture information.

18. The system as in claim 13 wherein said blend mix output includes information indicating a difference between actual blend cost and model blend cost.

5 19. The system as in claim 13 wherein said blend processor further produces a blend summary sheet for previous blends.

20. The system of claim 13 wherein said blend processor prints a blend mix sheet and a blend summary sheet.

10 21. The system of claim 13 wherein said grain comprises wheat and said blend processor specifies a blend of plural wheat lots to provide flour of a desired grade.